

(4) The affinities of *Apus somalicus* (Stephenson Clarke).

For many years it has been customary to treat this swift as a small race of *Apus pallidus* (Shelley). On examining it recently it appeared that its true affinities are with the small East African *A. niansae* (Richenow), a species of similar size to the Somali bird but darker; in fact one or two examples of *A. niansae* are nearly as pale as the Somali birds. I see no reason to keep *A. somalicus* as a race of *A. pallidus* and would in future place it as a race of *A. niansae*. It may be noted that *A. apus* (Linnaeus) ranges through Africa with breeding populations no smaller than the Palæartic races; it would be remarkable if the closely allied *A. pallidus* was represented in Africa by a much smaller bird which was unrelated to the small Africa Swift (*A. niansae*).

(5) On *Pogoniulus bilineatus poensis* Alexander.

I regard *P. bilineatus* and races and *P. leucolaima* and races as conspecific. Amadon (l. c. p. 421) refers to the doubts about this race and its validity. I have recently examined the series in the British Museum from Fernando Po. They are quite distinct from *P. b. leucolaima* (Verreaux) in their longer wing 58–63 mm. against 52.57 mm.; larger bill; clearer yellow, less greenish tinted underside and slightly paler lemon rump and upper tail coverts.

(6) *Chalcomitra rubescens* (Vieillot) in Northern Rhodesia.

This sunbird has hitherto been known in the south-west Belgian Congo as far south as Sandoa, Dilolo and Kinda, but appeared to be one of the several species for which the orographically almost invisible Congo-Zambesi watershed was an obstacle.

Mr. J. G. Williams has now very kindly pointed out to me that a female of it was collected by me at Mwinilunga in Northern Rhodesia on 4th October 1938, and long remained wrongly identified. It remains to ascertain what its status is in this area, but the record is of considerable importance in the zoogeographic significance of the Congo-Zambesi watershed, which appears to act as a barrier to the distribution of both birds and butterflies, and probably many other forms of life.

Geographical Variation in *Garrulax erythrocephalus* in Central and Western Himalayas with Description of a New Race from Nepal

By MR. CHARLES VAURIE

The Red-headed Laughing-thrush *Garrulax erythrocephalus* is widely distributed from Chamba in the Himalayas eastward to Sikang and the mountains of the Indo Chinese region and Malay Peninsula. It is very variable geographically and has been divided into more than a dozen subspecies, some of which are sharply differentiated. A long series examined from western and central Himalayas which includes, through the courtesy of Dr. A. L. Rand of the Chicago Natural History Museum, a series from west central Nepal, shows that a strong cline of increasing pigmentation runs from west to east. All these populations have hitherto

been called nominate *G. erythrocephalus* Vigors, 1832, Proc. Zool. Soc. London for 1830—1831, p. 171, type locality, Himalayas, but, as shown below, it is desirable to restrict this locality and to separate nomenclaturally the population of Nepal.

The geographical variation may be discussed first. The populations examined from the region of Simla westward to Kulu are palest, greyish-olive above with a tinge of brown on the mantle, the crown is bright reddish-chestnut, and the underparts fulvous tinged with pale greyish-olive on the flanks and under tail coverts, the populations from Tehri, Garhwal, and Kumaon becoming increasingly more saturated. East of Kumaon, at a distance of about 250 miles, the nearest population examined is from the Baglung district of west central Nepal. This population can no longer be referred to nominate *G. erythrocephalus* from which I propose to separate it as follows:—

Garrulax erythrocephalus kali new subspecies.

Type: Chicago Natural History Museum No. 211554; adult male; Lete, Kali River Valley, Baglung district, west central Nepal; 14th December 1949; R. L. Fleming, collector.

Description: Similar to nominate *G. erythrocephalus* but distinctly darker throughout, especially below, flanks dark, not pale greyish-olive, warmer fulvous on the breast, brownish tinge stronger throughout, including the sides of the tail, outer webs of the wing feathers a stronger, darker, golden-yellow, black area on the upper throat purer black and averaging larger, crown darker chestnut, black squamations on the mantle, sides of the neck, lower throat and upper breast averaging more numerous, larger and blacker.

Measurements of the type: Wing 105, tail 116, bill from skull 26.

Range: Nepal.

Specimens from Kumaon are about intermediate geographically and in their characters between the population of the region of Simla and that of the region of Baglung. In view of the clinal changes they should not, in my opinion, be separated as an additional race and since, taken in series, they are somewhat closer to the characters of the western populations, are best referred to nominate *G. erythrocephalus*.

The type locality of nominate *G. erythrocephalus* is "Himalayas" and is unsatisfactory and was restricted by Ticehurst and Whistler (1924, Ibis, pp. 468—473) to the Simla and Almora districts by implication when these authors restricted the type locality of all the birds described by Vigors in the 1832 paper to these regions. This action is open to serious objections (see Mayr, 1947, Jour. Bombay Nat. Hist. Soc., vol. 47, p. 125) but since they do not concern *G. erythrocephalus* is acceptable for this species. However, as I have shown, the population of Almora (i.e. Kumaon) differs from that of Simla, and Almora proper is separated from Simla proper by a gap of nearly 200 miles, a distance which in view of the marked clinal variation is almost as significant as the distance which separates Kumaon from the Baglung district of Nepal. Under the circumstances I believe that it is wiser to further restrict the type locality of nominate *G. erythrocephalus* and I accordingly do so restrict it to Simla.

If, as is to be expected, the clinal increase in pigmentation continues, the populations from central Nepal eastward will be found to be still darker and more richly coloured than typical *G. kali* but the region in which this red-headed form passes into the gray-headed *G. nigrimentum* is uncertain. Ripley (1950, Jour. Bombay Nat. Hist. Soc., vol. 49, p. 395) observed that the species is still red-headed in the region of Katmandu and suggests that since the type locality of *G. nigrimentum* is Nepal it should perhaps be restricted to the Ilam district of eastern Nepal. However, there is no proof that *G. nigrimentum* occurs in Nepal. Oates' *G. nigrimentum* (see 1889, Fauna Brit. India, vol. 1, p. 91) is based on a manuscript name to Hodgson's figure 820 in the library of the Zoological Society of London and the specimen depicted may have been from Darjeeling for, according to Kinnear (in Ludlow and Kinnear, 1937, Ibis, p. 32), "all the specimens of *G. nigrimentum* in the Hodgson collection were received in 1848 and 1859, after Hodgson had left Nepal in 1843 and gone to live at Darjeeling, and are, therefore almost certain to have come from Sikkim."

Garrulax erythrocephalus foxes rapidly but I have tried to exclude such specimens. All the specimens used were collected between November, 1931, to September, 1952, those from Kumaon were taken in 1948 and 1952 and those from west central Nepal in 1949.

On the Races of the Frigate Petrel, *Pelagodroma marina* (Latham) with a New Race from the Cape Verde Islands

By MR. W. R. P. BOURNE.

In his recent review of the races of the Frigate or White-faced Storm Petrel R. C. Murphy showed that the populations breeding in high latitudes are dark and heavily marked, while those breeding in lower latitudes where cool water wells up to the surface are progressively paler and have larger bills, wings, tarsi, and toes, and shorter tails with a smaller graduation (American Museum Novitates 1506, 1951). Unfortunately, while he was able to examine adequate series of the Pacific races and of the form described below as *P. eadesi* from the Cape Verde Islands, Dr. Murphy only saw five birds from each of the typical Atlantic populations, breeding at the Tristan da Cunha group (*P. marina* (Latham)) and the Salvages (*P. hypoleuca* (Webb, Berthelot, and Moquin Tandon)). He remarks that the Tristan birds are very similar to those from New Zealand, and that those from the Salvages show some characters intermediate between the subantarctic and subtropical forms, but comes to no final conclusion concerning the status of these races. Therefore I have examined the series in the British Museum to test Dr. Murphy's conclusions.

The series demonstrates the sexual dimorphism, and the progressive loss of pigment, increase in size, and shortness of the tail in lower latitudes discussed by Dr. Murphy. In addition the birds from the Tristan da Cunha group and New Zealand appear indistinguishable; since they apparently also have a similar natural history, and exploit a continuous zone of surface water along the subtropical convergence, I suggest the races *P. maoriana* Mathews and *P. marina* should be united. The birds from